



Patterns and Number Sequences

Name: _____

Date: _____

Grade: Grade 3

Part A: Multiple Choice

Circle the best answer for each question.

1. In the pattern 1, 3, 7, 15, what is the rule?

- A) Add 2 each time
- B) Double and add 1
- C) Multiply by 3
- D) Add 4 each time

2. An input-output table uses multiply by 3.

Which input gives an output of 27?

- A) 6
- B) 8
- C) 9
- D) 7

3. What comes next in the pattern 64, 32, 16, 8?

- A) 6
- B) 2
- C) 4
- D) 0

4. In the pattern 5, 10, 15, 20, 25, 30, what is the 8th number?

- A) 35
- B) 45
- C) 40
- D) 50

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 2, 6, 18, 54, each number is multiplied by 3. The next number is _____.
2. If the rule is subtract 7 and the input is 50, the output is _____.
3. In the addition table, the row for 8 shows 8, 16, 24, 32. The next number is _____.
4. The pattern 100, 85, 70, 55, 40 follows the rule subtract _____.
5. In the pattern 4, 12, _____, 108, the missing number is _____.

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1. In the pattern 1, 3, 7, 15, what is the rule?

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Which input gives an output of 27?

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- D) 0

4. In the pattern 5, 10, 15, 20, 25, 30, what is the 8th number?

- A) 35
- B) 45
- C) 40
- D) 50

Part B: Fill in the Blank

Write the correct answer on each line.

1. In the pattern 2, 6, 18, 54, each number is multiplied by 3. The next number is 162.
2. If the rule is subtract 7 and the input is 50, the output is 43.
3. In the addition table, the row for 8 shows 8, 16, 24, 32. The next number is 40.
4. The pattern 100, 85, 70, 55, 40 follows the rule subtract 15.
5. In the pattern 4, 12, 36, 108, the missing number is _____.